



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

February 10, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Crown Equipment Corporation / 133-18062-00031

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-MOD.dot 9/16/03

February 10, 2004

Mr. Brian Duffy
Crown Equipment Corporation
40-44 South Washington Street
New Bremen, OH 45869

Re: 133-18062
First Minor Permit Revision to
MSOP No.: 133-14606-00031

Dear Mr. Duffy:

Crown Equipment Corporation was issued a minor source operating permit on March 4, 2002, for a stationary truck parts manufacturing plant. A letter requesting a revision to this permit was received on October 8, 2003. Pursuant to the provisions of 326 IAC 2-6.1-6 a **minor** permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the replacement of the existing Pangborn shot blast machine with a new Wheelabrator shot blast machine.

The following construction conditions are applicable to the proposed project:

1. The data and information supplied with the application shall be considered part of this permit revision approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. _____ Pursuant to IC 13-15-5-3, this approval to construct becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-6.1-6, the minor source operating permit shall be revised by incorporating the minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this permit revision which includes this letter, the attached operating conditions applicable to these emission units, and revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Madhurima Moulik, at OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0, extension 3-0868, or dial (317) 233-0868.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

mm

cc: File - Putnam County
U.S. EPA, Region V
Putnam County Health Department
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

MINOR SOURCE OPERATING PERMIT (MSOP)

OFFICE OF AIR QUALITY

Crown Equipment Corporation
2600 East State Road 240
Greencastle, Indiana 46135

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 133-14606-00031	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: March 4, 2002

First Minor Permit Revision No.: 133-18062	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 10, 2004

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary truck parts manufacturing plant.

Authorized Individual: Teresa Keck
Source Address: 2600 East State Road 240, Greencastle, Indiana 46135
Mailing Address: 2600 East State Road 240, P.O. Box 840, Greencastle, Indiana 46135
Phone Number: 765-653-4240
SIC Code: 3735
County Location: Putnam
County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD Rules;

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) One (1) air atomizing paint spray booth, identified as SPPL, with a maximum capacity of spraying twenty-eight (28) small parts per hour, installed October 1996, using waterwash for particulate matter overspray control, and exhausting to stack S4;
- (b) One (1) air atomizing paint spray booth, identified as LPPL, with a maximum capacity of spraying three (3) large parts per hour, installed October 1996, using waterwash for particulate matter overspray control, and exhausting to stacks S2 and S3;
- (c) One (1) Wheelabrator shot blast machine with a blast rate of 1,600 pounds steel shot per hour, to be installed in November 2003, equipped with a baghouse for particulate matter control, and exhausting to stack S9;
- (d) One (1) natural gas fired phosphate washer rated at 1.5 million British thermal units per hour (MMBtu/hr) and exhausting to stacks S5 and S6;
- (e) One (1) natural gas fired dry off oven rated 0.8 MMBtu/hr and exhausting to stack S7;
- (f) One (1) natural gas fired cure oven rated at 2.5 MMBtu/hr and exhausting to stack S8;
- (g) One (1) natural gas fired air make-up unit rated 3.89 MMBtu/hr and exhausting to stack S10

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

One (1) Wheelabrator shot blast machine with a blast rate of 1,600 pounds steel shot per hour, to be installed in November 2003, equipped with a baghouse for particulate matter control, and exhausting to stack S9;

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the Wheelabrator shot blast machine shall not exceed 1.83 pounds per hour when operating at a process weight rate of 0.3 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.2 Particulate Matter (PM)

In order to comply with Condition D.2.1, the baghouse for PM control shall be in operation at all times when the shot blaster is in operation.

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a MSOP Minor Permit Revision

Source Background and Description

Source Name:	Crown Equipment Corporation
Source Location:	2600 East State Road 240, Greencastle, Indiana 46135
County:	Putnam
SIC Code:	3735
Operation Permit No.:	133-14606-00031
Operation Permit Issuance Date:	March 4, 2002
Permit Revision No.:	133-18062
Permit Reviewer:	Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed an application from Crown Equipment Corporation relating to the construction and operation of one (1) Wheelabrator shot blast machine to replace an existing shot blast machine.

New Emission Units and Pollution Control Equipment

The source also consists of the following new facilities/units:

- (a) One (1) Wheelabrator shot blast machine with a blast rate of 600 pounds steel shot per hour, to be installed in November 2003, equipped with a baghouse for particulate matter control (99.8% efficiency), and exhausting to stack S9.

Existing Approvals

The source has been operating under previous approvals including, but no limited to, the following:

- (a) Minor Source Operating Permit No.: 133-14606-00031, issued on March 4, 2002.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 8, 2003, with additional information received on October 30, 2003.

Emission Calculations

Wheelabrator Emissions:

Emission Factor for steel shots = 0.004 lb PM/lb abrasive (STAPPA/ALAPCO, "Air Quality Permits", Vol. 1, Section 3, "Abrasive Blasting", 1991 Edition)

Also, PM-10 = 0.86 x PM

Flow Rate of steel shots = 600 lb/hr.

Therefore, potential PM emissions (unrestricted) = 0.004 lb/lb abrasive x 600 lb/hr = 2.4 lb/hr = 10.5 tons per year.

Potential PM-10 emissions (unrestricted) = 0.86 x 10.5 tons per year = 9.03 tons per year.

The baghouse has a control efficiency of 99.8%.

Therefore, controlled PM emissions = 0.021 tons/yr

Controlled PM-10 emissions = 0.02 tons/yr

Potential to Emit of Revision Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	10.5
PM-10	9.03
SO ₂	-
VOC	-
CO	-
NO _x	-

Justification for the Revision

The MSOP is being modified through a Minor Permit Revision. This revision is being performed pursuant to 326 IAC 2-6.1-6(g)(4)(A), which states that a minor permit revision can be used for “modifications that have the potential to emit less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year of either particulate matter (PM) or particulate matter less than ten (10) microns”.

County Attainment Status

The source is located in Putnam County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Putnam County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

- (b) Putnam County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	0.68
PM-10	0.90
SO ₂	0.02
VOC	13.71
CO	3.20
NO _x	3.81

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the controlled potential to emit of the source (see Technical Support Document for MSOP No. 133-14606-00031).

Proposed Modification

PTE from the proposed modification (based on 8760 hours of operation per year at rated capacity including enforceable emission control and production limit where applicable):

Pollutant	PM (ton/yr)	PM-10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	0.021	0.02	-	-	-	-
PSD or Offset Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD major source levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from the new Wheelabrator shot blast machine, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

State Rule Applicability – Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Putnam County and the potential to emit of all criteria pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this truck parts manufacturing plant will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the Wheelabrator shot blast machine shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

For a process weight rate of 600 pounds of shot blast per hour, $E = 1.83 \text{ lb/hr}$

The controlled PM emissions from the Wheelabrator = 0.005 lb/hr. Therefore, the Wheelabrator is in compliance with the requirements of 326 IAC 6-3-2.

The baghouse shall be operated at all times that the Wheelabrator is in operation according to the manufacturer's specifications, in order to comply with this limit.

Conclusion

The construction and operation of the Wheelabrator shot blast machine shall be subject to the conditions of the MSOP Minor Permit Revision No.: 133-18062-00031.

CHANGES TO MSOP

The following are the changes to MSOP No.: 133-14606-00031 (~~strikeout~~ to show deletions and **bold** to show additions):

(1) Section A.2(c) and D.2 are modified as follows:

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (c) One (1) ~~Pangborn~~ **Wheelabrator** shot blast machine with a blast rate of 1,600 pounds steel shot per hour, ~~to be installed in October 1996~~ **November 2003**, equipped with a baghouse for particulate matter control, and exhausting to stack S9;

(2) Section D.2 is modified as follows:

Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the ~~Pangborn~~ **Wheelabrator** shot blast machine shall not exceed 3.53 pounds per hour when operating at a process weight rate of 0.8 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour